Applicant:

Sun-Uk Kim et al.

Serial No. : 10/560,023

December 8, 2005

Filed Page

2 of 10

## AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Attorney Docket No.: 76303-003US1

Client Ref. No.: OPP053249US

## Listing of claims

1. (Currently amended) A method for fabricating a porous silica sphere comprising:

heat-treating a silica gel by increasing its temperature at a speed of less than 5 to 90°C per minute up to 1050 [[or]] to 1200°C; and

maintaining the temperature for a predetermined time, wherein the heat-treatment is performed in a rotary tube furnace.

- 2. (Original) The method of claim 1, wherein the silica gel has pores with a size of about 20-70 angstroms, and a pore volume of around 0.3 to 1.1 mL/g.
  - 3. (Cancelled)
- 4. (Original) The method of claim 1, wherein the heat-treatment is performed at an average temperature elevating speed ranging from 10°C to 70°C per minute.
  - 5. (Cancelled)
- 6. (Currently amended) A method for fabricating a porous silica sphere comprising:

a heat treatment process, wherein silica gel is subjected to a first heat-treatment at 400 to 900°C, and is subjected to a second heat-treatment at 1050 to 1200°C in which the heat-treatment process is performed using at least two rotary tube furnaces and, in the first heat-treatment, the temperature in a first rotary tube furnace is increased at an average speed of 35 to 70°C per minute up to 700°C.

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Sun-Uk Kim et al.

Serial No. :

10/560,023

Filed Page

December 8, 2005

3 of 10

Attorney Docket No.: 76303-003US1 Client Ref. No.: OPP053249US

- 7. (Original) The method of claim 6, wherein the first heat treatment is performed for 20 to 60 minutes, and the second heat treatment is performed for 20 to 60 minutes.
  - 8. (Cancelled)
  - 9. (Currently amended) The method of claim 6, which comprises putting the silica gel into a first tube furnace;

subjecting it to a first heat treatment by increasing the temperature at an average speed of 35°C to 70°C up to 700°C, and then maintaining it for 10 to 20 minutes; and subjecting it to a second heat treatment in the second tube furnace at 1100°C to 1150°C, and then maintaining it for 20 to 60 minutes wherein the silica gel is subjected to a second heat treatment, in a second rotary tube furnace, at a temperature of 1100 to <u>1150°C</u>.